ABSTRACT OF THE DISCLOSURE

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A probe testing apparatus reads the surface shape of a contact pad in pressure contact with a contact probe, and differentiates the read surface shape to extract a multiplicity of flat parts. Next, the probe testing apparatus complements the multiplicity of flat parts to generate a reference shape, and subtracts the reference shape from an averaged surface shape to detect a plurality of recesses having a predetermined depth or more. Next, the probe testing apparatus selects one from the plurality of recesses corresponding to reference information, enlarges the selected recess outward by predetermined dimensions, and subtracts the reference shape from the initial surface shape at the position of the enlarged recess to detect an impression of the contact probe. Finally, the probe testing apparatus determines from the position and depth of the detected impression whether the contact probe is acceptable or defective. In this manner, even if the compact pad is formed with miniature irregularities on the surface thereof, the probe testing apparatus can precisely detect the impression of the contact probe from the surface shape to determine whether the contact probe is acceptable or defective.